

Extensometer

FEATURES

- Strain gage-based sensor, redundant option available
- Coated alloy steel construction
- 2 bolt holes, M10 12.9 required
- 15,000 PLd capable
- EDOC (Electrodeposited organic coating)

APPLICATIONS

- Off-highway vehicles, agricultural equipment
- Construction equipment
- Lifting machines
- Telescopic loaders

DESCRIPTION

The Model 182 Extensometer is a sensor-based instrument that is designed to measure the deformation of a load-bearing specimen.

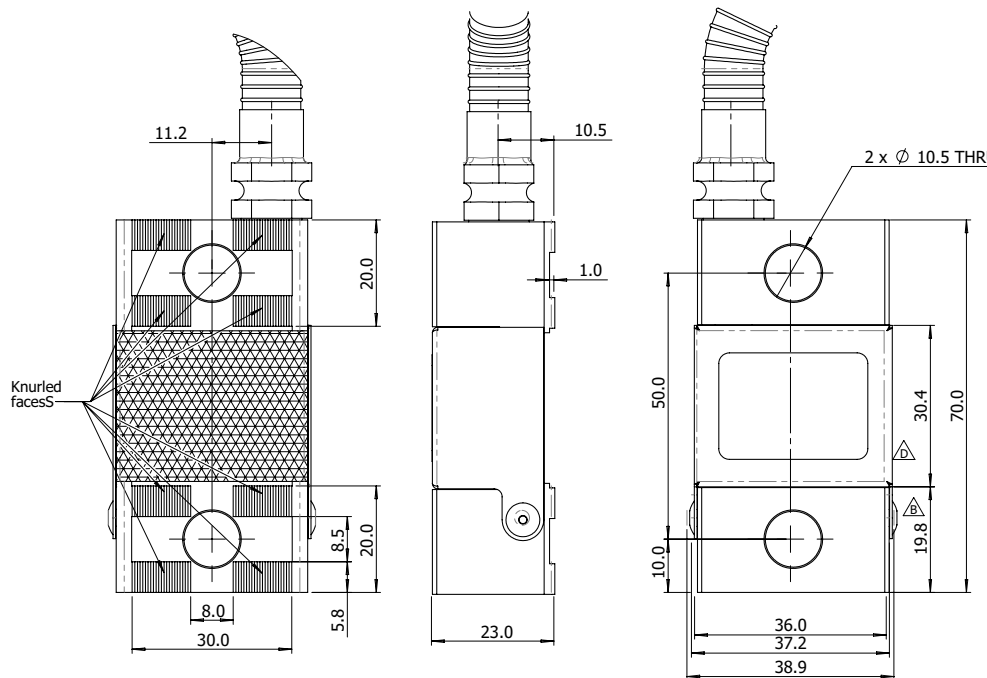
The design of the Model 182 features a robust construction and provides good repeatability, even in demanding environments. This extensometer can be mounted on any machinery or vehicle. Applications include: telescopic loaders, scissor lifts, boom lifts, forklifts and other load lifting machinery. The device is an ideal choice for industrial vehicle applications, especially

where safety is a critical factor in preventing loss of life.

Flexibility is also a unique feature that the Model 182 offers. This device is available with several output level trim options. Ranging from different connectors (M12 or DT type) to different protocols (mV/V, CAN Bus, CAN Open or J1939), the Model 182 extensometer is an excellent solution for load lifting safety concerns.



OUTLINE DIMENSIONS



Connector Pin Assignment with optional DT04-6P connector

Pin	Function
1	Shield
2	CAN V+
3	CAN GND
4	CAN H
5	CAN L
6	No connection

Extensometer

SPECIFICATIONS		
PARAMETER	VALUE	UNIT
VPG Transducers accuracy class	Z	
Eq. rated capacity – RC*	120	kg
Eq. rated output – RO*	1.6–2.3	mV/V
Zero balance	0.2	±mV/V
Temperature effect on zero	0.00026	mV/V/°C
	0.02	±% of R.O./°C
Temperature range, compensated	–30 to +80	°C
Temperature range, safe	–40 to +90	°C
Temperature range, storage	–40 to +100	°C
Cable type	CAN ready, PU jacket, DT04-4P receptacle, grounded shield	
Cable length	0.2, 0.5, 1.0	m
Construction	Coated alloy steel sensor, stainless steel electronics housing, RTV potting	
Environmental protection	IP67	

* When sensing 500 µε

All specifications are subject to change without notice.

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.